Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-37. (Canceled)

38. (Withdrawn) A vaccine for preventing and/or treating an amyloid-related disease in a subject, comprising an antibody raised against an antigenic amount of a peptide comprising at least one unnatural amino acid selected from the group consisting of a D-amino acid, an α, α-disubstituted amino acid, an N-alkyl amino acid, lactic acid, 4-hydroxyproline, γ-carboxyglutamate, ϵ-N,N,N-trimethyllysine, ϵ-N-acetyllysine, O-phosphoserine, N-acetylserine, N-formylmethionine, 3-methylhistidine, 5-hydroxylysine, ω-N-methylarginine, and isoaspartic acid, wherein said antibody interacts with at least one region of an amyloid protein sufficient to prevent and/or treat said disease.

39. (Withdrawn) The vaccine of claim 38, wherein said peptide is Aβ peptide, an immunogenic fragment thereof, a protein conjugate thereof, an immunogenic derivative peptide thereof, or a peptidomimetic thereof.

40. (Withdrawn) The vaccine of claim 39, wherein said peptide is comprised of at least one D-amino acid.

41. (Withdrawn) The vaccine of claim 40, wherein said peptide is selected from the group consisting of Aβ1-42, Aβ1-40, Aβ1-10, Aβ1-12, Aβ1-28, Aβ13-28, Aβ17-28, and Aβ35-42.

42. (Withdrawn) The vaccine of claim 41, wherein said peptide is modified by inserting one or more amino acid residues, or by substituting one or more amino acid residues with other amino acids.

43. (Withdrawn) The vaccine of claim 38, wherein said subject is a human being.

44. (Withdrawn) The vaccine of claim 38, wherein said disease is Alzheimer's disease.

45. (Withdrawn) A vaccine for preventing and/or treating an amyloid-related disease in a subject, comprising an antigenic amount of a peptide comprising at least one unnatural amino acid selected from the group consisting of a D-amino acid, an α, α-disubstituted amino acid, an N-alkyl amino acid, lactic acid, 4-hydroxyproline, γ-carboxyglutamate, ϵ-N,N,N-trimethyllysine, ϵ-N-acetyllysine, O-phosphoserine, N-acetylserine, N-formylmethionine, 3-methylhistidine, 5-hydroxylysine, ω-N-methylarginine, and isoaspartic acid, which elicits an immune response by said subject sufficient to prevent and/or treat said disease.

46. (Withdrawn) The vaccine of claim 45, wherein said peptide is Aβ peptide, an immunogenic fragment thereof, a protein conjugate thereof, an immunogenic derivative peptide thereof, or a peptidomimetic thereof.

47. (Withdrawn) The vaccine of claim 46, wherein said peptide is comprised of at least one D-amino acid.

48. (Withdrawn) The vaccine of claim 47, wherein said peptide is selected from the group consisting of Aβ1-42, Aβ1-40, Aβ1-10, Aβ1-12, Aβ1-28, Aβ13-28, Aβ17-28, and Aβ35-42.

49. (Withdrawn) The vaccine of claim 48, wherein said peptide is modified by inserting one or more amino acid residues, or by substituting one or more amino acid residues with other amino acids.

50. (Withdrawn) The vaccine of claim 45, wherein said subject is a human being.

51. (Withdrawn) The vaccine of claim 45, wherein said disease is Alzheimer's disease.

52. (Withdrawn) A method for preventing and/or treating an amyloid-related disease in a subject, comprising administering an antibody raised against an antigenic amount of a peptide comprising at least one unnatural amino acid selected from the group consisting of a D-amino acid, an α, α-disubstituted amino acids, an N-alkyl amino acid, lactic acid, 4-hydroxyproline, γ-carboxyglutamate, ϵ-N,N,N-trimethyllysine, ϵ-N-acetyllysine, O-phosphoserine, N-acetylserine, N-formylmethionine, 3-methylhistidine, 5-hydroxylysine, ω-N-methylarginine, and isoaspartic acid, wherein said antibody interacts with at least one region of an amyloid protein sufficient to prevent and/or treat said disease.

53. (Withdrawn) The method of claim 52, wherein said peptide is Aβ peptide, an immunogenic fragment thereof, a protein conjugate thereof, an immunogenic derivative peptide thereof, or a peptidomimetic thereof.

54. (Withdrawn) The method of claim 53, wherein said peptide is comprised of at least one D-amino acid.

55. (Withdrawn) The method of claim 54, wherein said peptide is selected from the group consisting of Aβ1-42, Aβ1-40, Aβ1-10, Aβ1-12, Aβ1-28, Aβ13-28, Aβ17-28, and Aβ35-42.

56. (Withdrawn) The method of claim 55, wherein said peptide is modified by inserting one or more amino acid residues, or by substituting one or more amino acid residues with other amino acids.

57. (Withdrawn) The method of claim 52, wherein said subject is a human being.

58. (Withdrawn) The method of claim 52, wherein said disease is Alzheimer's disease.

59. (New) A method for prophylaxis of Alzheimer's disease in a subject, comprising administering to the subject a dosage of an immunogenic fragment of Aβ (SEQ ID NO. 42) effective to produce an immune response comprising antibodies against Aβ, wherein at least one amino acid of the immunogenic fragment is a D amino acid, thereby effecting prophylaxis of said disease.

60. (New) The method of claim 59, further comprising administering an adjuvant with said peptide.

61. (New) The method of claim 60, wherein said adjuvant is selected from the group consisting of STIMULON QS-21, 3 De-O-acylated-monophosphoryl lipid A, and alum.

62. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-3.

63. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-4.

64. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-5.

65. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-6.

66. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-7.

67. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-12.

68. (New) The method of claim 59, wherein said Aβ fragment is Aβ 13-28.

69. (New) The method of claim 59, wherein said Aβ fragment is Aβ 25-35.

70. (New) The method of claim 59, wherein said Aβ fragment is Aβ 33-42.

71. (New) The method of claim 62, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

72. (New) The method of claim 63, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

73. (New) The method of claim 64, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

74. (New) The method of claim 65, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

75. (New) The method of claim 66, wherein said Aβ fragment is linked to a carrier molecule5 to form a conjugate.

76. (New) The method of claim 67, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

77. (New) The method of claim 68, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

78. (New) The method of claim 69, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

78. (New) The method of claim 70, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

80. (New) The method of claim 59, wherein the subject has a known genetic risk of Alzheimer's disease.

81. (New) The method of claim 59, wherein said subject is a human being.

82. (New) A method for treating Alzheimer's disease in a subject, comprising administering to the subject a dosage of an immunogenic fragment of Aβ (SEQ ID NO. 42) effective to produce an immune response comprising antibodies against Aβ, wherein at least one amino acid of the immunogenic fragment is a D amino acid, thereby treating the disease.

83. (New) The method of claim 65, further comprising administering an adjuvant with said peptide.

84. (New) The method of claim 60, wherein said adjuvant is selected from the group consisting of STIMULON QS-21, 3 De-O-acylated-monophosphoryl lipid A, and alum.

85. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-3.

86. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-4.

87. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-5.

88. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-6.

89. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-7.

90. (New) The method of claim 59, wherein said Aβ fragment is Aβ 1-12.

91. (New) The method of claim 59, wherein said Aβ fragment is Aβ 13-28.

92. (New) The method of claim 59, wherein said Aβ fragment is Aβ 25-35.

93. (New) The method of claim 59, wherein said Aβ fragment is Aβ 33-42.

94. (New) The method of claim 62, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

95. (New) The method of claim 63, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

96. (New) The method of claim 64, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

97. (New) The method of claim 65, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

98. (New) The method of claim 66, wherein said Aβ fragment is linked to a carrier molecule5 to form a conjugate.

99. (New) The method of claim 67, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

100. (New) The method of claim 68, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

101. (New) The method of claim 69, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

102. (New) The method of claim 70, wherein said Aβ fragment is linked to a carrier molecule to form a conjugate.

103. (New) The method of claim 59, wherein the subject has a known genetic risk of Alzheimer's disease.

104. (New) The method of claim 59, wherein said subject is a human being.